

Claim Amendments

What is claimed is:

1. (currently amended) A method for managing performance information for a communication between communication system terminal endpoints (TEs) communicating over an Internet Protocol (IP) network, comprising the steps of:

transmitting a Diagnostic Configuration Message (DCM) from a Diagnostic Supervisor (DS) to at least one TE, wherein the DS is capable of being coupled to the at least one TE;

generating Diagnostic Messages (DMs) at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs;

transmitting the DMs from the at least one TE to at least one DS; and
calculating a value for a quality of service of the communication based on the DMs;

wherein the quality of service is based on communication parameters including at least one of [the] a number of collisions, jitter, amount of lost packets and amount of [the] network usage; and

wherein the quality of service is further based on weighting the communication parameters, the weighting based on an importance associated with each communication parameter[.] and

wherein the method further includes selectively adjusting one of a plurality of different transmission parameters of each TE via a real time response

manager, the adjustments including adjustments to route, parameter thresholds and packet size and wherein the adjustment is made based on the calculated quality of service.

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (cancelled)

8. (cancelled)

9. (previously presented) A method for managing performance information for a communication between communication system terminal endpoints (TEs) communicating over an Internet Protocol (IP) network, comprising the steps of:

transmitting a Diagnostic Configuration Message (DCM) from a Diagnostic Supervisor (DS) to at least one TE, wherein the DS is capable of being coupled to the at least one TE;

generating Diagnostic Messages (DMs) at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs;

transmitting the DMs from the at least one TE to at least one DS; and

calculating a value for the quality of service of the communication based on the DMs;

wherein the communication is transmitted using a plurality of packets each possessing a packet size, the method further comprising the step of determining whether to change the packet size based on the determined value of the quality of service relative to a threshold value QoS_Packet_Threshold.

10. (original) The method according to claim 9, the method further comprising the step of decreasing the packet size if the value of the quality of service is better than the QoS_Packet_Threshold.

11. (original) The method according to claim 9, the method further comprising the step of increasing an original packet size if the value of the quality of service is poorer than the QoS_Packet_Threshold.

12. (currently amended) The method according to claim 11, the method further comprising the steps of:

determining if increasing the [original] packet size improved the quality of service; and

if the quality of service is improved, then maintaining the increased packet size.

13. (currently amended) The method according to claim 11, the method further comprising the steps of:

determining if increasing the [original] packet size improved the quality of service; and

if the quality of service is not improved, then returning the increased packet size to the original packet size.

14. (currently amended) A method for managing performance information for a communication between communication system terminal endpoints (TEs) communicating over an Internet Protocol (IP) network, comprising the steps of:

transmitting a Diagnostic Configuration Message (DCM) from a Diagnostic Supervisor (DS) to at least one TE, wherein the DS is capable of being coupled to the at least one TE;

generating Diagnostic Messages (DMs) at the at least one TE based on diagnostic information concerning IP network transmissions in which the at least one TE participates, the DCM instructing the at least one TE how to format and under what criteria to transmit the DMs;

transmitting the DMs from the at least one TE to at least one DS; and

calculating a value for the quality of service of the communication based on the DMs;

wherein communications between TEs are performed using at least one codec, the method further comprising the step of determining whether to change

the codec so as to use a different codec based on the [determined] calculated value of the quality of service relative to a threshold value QoS_Codec_Threshold.

15. (original) The method according to claim 14, wherein the step of determining whether to change the codec includes the steps of:

determining if the quality of service is less than QoS_Codec_Threshold;

if the quality of service is less than QoS_Codec_Threshold, then determining if there is a lower data value codec available for all callers in the transmission;

if there is a lower data value codec available for all callers in the transmission, then changing the codec from an original data value to the lower data value.

16. (original) The method of claim 15, further comprising the steps of:

determining if changing the codec to the lower data value improved the quality of service; and

if the quality of service is not improved, then returning the codec data value to the original data value.

17. (currently amended) The method according to claim 1, the method further comprising the step of rerouting an IP network connection between two or more TEs to the public switched telephone network (PSTN) based on the [determined] calculated value of the quality of service relative to a threshold value.

18. (currently amended) The method according to claim 1, the method further comprising the step of determining whether to terminate a communication based on the [determined] calculated value of the quality of service relative to a threshold value.

19. (previously presented) The method according to claim 1, wherein the communication is voice, modem, facsimile, video or data transmissions.

20. (cancelled)

21. (cancelled)

22. (cancelled)

23. (cancelled)

24. (cancelled)

25. (cancelled)

26. (cancelled)

27. (cancelled)